## production and Quality of Strawberry

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The annual strawberry production in Brazil is estimated at 100,000 tons in an area of 1 500 ha. One of the important factor that influence the strawberry production is the cultivars choice which must be selected for each region, based on yield, pests and diseases tolerance, and market acceptance. The aim was to evaluate yield and fruit quality of four strawberry cultivars in Pelotas city (Southern Brazil). The experiment was conducted in a private farm during the 2010 strawberry season (from May to December). The cultivars planted were Aromas, Camarosa, Camino Real and Florida Festival, on annual hill system, conducted in three lines with spacing 0.30m × 0.30m, within row under low tunnels. The experimental design was randomized blocks with four repetitions and twelve plants for each plot. The data were subjected to ANOVA and the means comparison performed by the Pukey test at 5% probability. The evaluations performed were yield, fruit's number per plant and fruit weight and the quality ratings were anthocyanins, phenolic compounds and antioxidants content. Regarding the number and fruit weight per plant, Aromas performed better than the other cultivars. As for the variable fruit weight, Camarosa had the highest fruit among cultivars evaluated. For phenolic compounds content Aromas' and 'Florida Festival' were superior to 'Camino Real', but to the anthocyanin content 'Camino Real' showed higher levels than the other cultivars. It is concluded that the 'Camarosa' has larger fruit, however 'Aromas' yield is superior in the Pelotas city. 'Camino Real' has the lowest values of phenolic content and higher anthocyanins levels.